

MINERAL INFORMATION SERVICE

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MAPS USED IN MINERAL INVESTIGATIONS

By BENNIE W. TROXEL

Maps are known to have been used since about 3800 B.C. when impressions were made by hand on clay tablets to show part of Mesopotamia (Crone, 1953, p. 15). Hand-drawn maps were made on papyrus as early as 1366 B.C. Wood, bronze and other materials were also used by early map makers. The earliest date of a printed map was 1460 A.D. (Fordham, 1921, p. 9). Since then, map-making has increased to such an extent that today maps are common items, yet detailed maps of various parts of the world are still lacking.

A map is a representation of features of the surface of the earth or some part of it, usually shown on a flat surface at a given scale. It shows the relative size and position of certain physical features as well as boundaries or projected lines of reference. Most features on maps are shown by the use of special symbols or colors so that as much information as possible can be shown. Most maps are made as if the observer were looking straight down upon the area represented (plan view), but some maps are projected so that the observer is afforded an oblique view in perspective. Rectangular maps are

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CALIFORNIA MINING EVENTS, 1959

By FENELON F. DAVIS AND STAFF

The total value of California mineral production declined in 1959 for the second straight year. The estimated value is \$1,433,000,000, off about 4 percent from the 1958 total of \$1,500,000,000 (revised). The value of production in the fuel and metal groups continued to decline. Gold production dropped to the lowest point in 15 years, the second lowest level in the history of the State. The brightest spot in the mining picture appeared in the industrial minerals group where the value of production advanced about 8 percent over 1958, as six commodities established all-time highs in quantity and value of production.

FUELS

Petroleum production dropped for the sixth consecutive year. The decline in the price paid for crude oil, which began in 1958, continued unabated through 1959 and accentuated the drop in the dollar value of this commodity. A decline of 2 percent in petroleum production and 10 percent in value is estimated compared to 1958. Drilling activity was near

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One of the bright spots in California's mineral production for 1959 was the increase in the production of the industrial minerals. The value of sand and gravel production during the year will probably match the previous all-time high of \$96,776,212, established in 1956. Photo courtesy of Rock Products.